



## Registry Products What's New – September 2002 Scientific Technologies Corporation

### IWeb2000 v2.6.2

#### IWEB Security Module

- Tracks all data entered or modified by user
- Tracks query data: Date/Time, User
- Allows dimming or inactivation of fields when access is not authorized
- Provides for configurable archival of data based upon date of birth.
- Detects and logs unsuccessful login attempts
- Detects and logs login attempts that occur outside of normal business hours

#### **The Physician/Vaccinator settings were changed to specify if the person is a physician, vaccinator, or both.**

- The field "type" was added throughout the Physician Toolbox as an identifier describing if the entry is for a Physician, Vaccinator, or has both roles. This new field is required for new entries. *All existing data will be given the value of 'Both' at the time of the upgrade.*
- A new search option was added to the Physician Toolbox to allow searches on Physician, Vaccinator or Both.
- The Physician drop down list on the Patient Demographics screen only displays those Physicians entered into the Physician/Vaccinator Toolbox who were designated as a Physician or Both.
- The Vaccinator drop down list on the Vaccination Add screen only displays those Vaccinators entered into the Physician/Vaccinator Toolbox who were designated as a Vaccinator or Both.
- The Vaccinator drop down list on the Vaccination Edit screen only displays those Vaccinators entered into the Physician/Vaccinator Toolbox who were designated as a Vaccinator or Both.
- All reports in report criteria sections break out Physicians or Vaccinators when appropriate. Or if the report specifically only uses the physician field from the patient demographics, the Physician drop down list on the menu only shows those Physicians entered into the Physician/Vaccinator Toolbox who were designated as a Physician or Both. Subsequently, each report query was modified to reflect the new criteria choices.
- The Physician drop down list on the Personal Settings screen, under "Patient Defaults," only displays those Physicians entered into the Physician/Vaccinator Toolbox who were designated as a Physician or Both.
- The Vaccinator drop down list on the Personal Settings screen, under "Vaccination Defaults," only displays those Vaccinators entered into the Physician/Vaccinator Toolbox who were designated as a Vaccinator or Both.

- The CASA export has broken out the Physician/Vaccinator field into two separate choices, one for Primary Care Physician and one for Vaccinator. Subsequently the query to produce the CASA export was modified to reflect the new criteria choices.
- The Reminder Recall Physician drop down list was changed to only display Physicians entered into the Physician/Vaccinator Toolbox who were designated as a Physician or Both.
- All state-specific reports that use a Physician or Vaccinator drop down list were modified to follow the same logic as the rest of the application.

### **New checkbox coding for entire site**

#### Checkboxes/Drop downs:

- When an item is selected from the drop down list, the corresponding checkbox will be checked automatically.
- A checkbox can no longer be checked until a selection from the corresponding dropdown is made.
- When the dropdown list is reset, the corresponding checkbox will be unchecked automatically.
- When the checkbox is unchecked, the corresponding dropdown list will reset automatically.

#### Checkboxes/Textboxes:

- When text is entered into the textbox, the corresponding checkbox will be checked automatically.
- A checkbox can no longer be checked until a value is entered into the corresponding textbox.
- When all the text is deleted from the textbox, the corresponding checkbox will be unchecked automatically.
- When the checkbox is unchecked, the text in the corresponding textbox will be deleted automatically.

#### Checkboxes/Date Ranges:

- When dates are entered into both date range fields, the corresponding checkbox will be checked automatically.
- A checkbox can no longer be checked until values are entered into the corresponding date range fields.
- When the dates are deleted from both date range fields, the corresponding checkbox will be unchecked automatically.
- When the checkbox is unchecked, the two dates in the corresponding date fields will be deleted automatically.

#### Checkboxes/Lookups:

*Note - a lookup is a combination of textboxes and hidden fields whose values are set when a record is selected from the popup window for that lookup; a lookup might be dependent on another "key" field, such as a dropdown list value; an example of a lookup is the County field dependent upon a State selection.*

- When a record is selected from the popup window for the lookup, the corresponding checkbox will be checked automatically.
- A checkbox can no longer be checked until a selection has been made from the corresponding lookup and entered into the corresponding textbox.
- When the lookup is cleared (done from the popup window), the corresponding checkbox will be unchecked automatically.
- When the checkbox is unchecked, the corresponding lookup field(s) and data will be deleted automatically.

- When the "key" field's value has changed or been cleared, the lookup field(s) and data will be deleted and the corresponding lookup checkbox will be unchecked automatically.
- When the "key" field's checkbox has been unchecked, the lookup field(s) and data will be deleted and the corresponding lookup checkbox will be unchecked automatically.
- In addition, Reports Module was changed so that reports would open up in a new window.

### **Adding Administered Shots**

- The lot number selection screen is limited by lot numbers not expired based upon the vaccination date, not the current date.
- Administered dates that are before the patient's birth date or are future dates are not allowed.

### **Lot Number Listing**

- All drop downs have been reordered based upon facility, vaccine, and expiration date.
- Adding Vaccine Lot Number process has been modified to eliminate unnecessary steps. Old process sent user to the Lot Number Edit page several repeatedly to process new lot numbers.

### **Facility Groups**

Description of what is involved in web implementation: Users can select any facility or physician within their facility group in the drop downs in the Patient Demographics, Vaccination Detail, and Personal Settings screens. They can also do reports, CASA, etc., for any facility in their group. Previously, a user assigned to a facility (Facility Client) could only select the facility they were assigned to. This enhancement now enables them to select from a group of facilities. A user's inventory will still be only associated with the facility they are assigned to.

### **CASA Formatting/Validation changes**

A pop-up warning dialog was added on CASA Export to check for Patient Birthday Range.

### **Physician/Vaccinator Format/Validation Changes**

- Valid email addresses are now checked for in the Physician/Vaccinator Toolbox.
- The Suffix textbox is now a drop down in the Physician/Vaccinator Toolbox.
- The Physician & Vaccinator names were reformatted to display Last Name, First name in the drop down lists.

### **Reminder Recall / New limiters**

- The ability to select reminder list by patient date of birth and due date range was added
- A checkbox to "Don't Increment Count" was added so that the report can be run without incrementing the recall count for the patients returned for that report

### **Invalid Vaccinations**

Changed wording on the Vaccine History screen and the Vaccine Summary screen from "Invalid vaccinations are marked with an 'X'" to "Vaccinations outside the ACIP schedule are marked with an 'X'"

### **Add Age to Demographics Screen**

The patient's calculated age is now shown on the Patient Demographic screen.

### **VFC Field Drop down Change**

The VFC Field drop down list was modified to display "Ineligible" when "Ineligible" is initially selected from the drop down list.

### **Scanner Search**

- When searching for a patient utilizing a scanner, the patient search result page is bypassed. The reason is that the patient ID is unique and the scanner eliminates the possibility of data entry error. If there is not patient match, the search result page will be displayed with the *No Match* message. The Patient Demographic page will open directly after scanning.

### **Print Settings**

Removed all pop up boxes displaying print settings where possible. The suggested print settings information has been moved to the "menu" screen if one exists. If a menu screen did not exist, the pop up dialog box was left.

### **Record Ownership**

A new field designated as "ownership" was added to the database. An IRMS/Facility/Physician who is given access to "own" a record, and who edits either the Patient Demographic screen or who administers/edits a vaccination will be designated as "owner" of the record.

- Both Reminder Recall and CASA were modified to run based on the ownership – meaning that only the IRMS/Facility that owns the record can run these reports on the patient.
- Ownership changes when one of the following occurs:
  - A user edits the demographic record and adjusts sets the facility field
  - A user enters an administrated vaccination or
  - A user enters a historical vaccination and their facility as the documenting facility.
- Ownership does NOT change at the following:
  - A user edits any other fields within the demographic record
  - A user edits or deletes a vaccination record
  - A user searches and/or views a patient's record and/or prints out the patient's record.

### **IWeb Help**

IWeb Help was updated to reflect the most recent IWeb changes and features.

### **Additional Guardian First Name**

A Guardian First Name 2 field was added to the Patient Demographics, Add, and Edit pages to record a second guardian's first name.

## Historical Grid Data Validation

- In the patient historical vaccine (grid) page, a date validation check will occur when the user tabs or clicks out of each date field. Previously, this occurred when the user clicked the *Add Vaccination* button.

## New/Updated Reports

- Patient Record Reports
  - Patient's Primary Care Physician has been added the Patient, Summary, Forecast, and History report.
- Report Module
  - Reminder Recall for Inactivation was added as a new report. This report returns a list of patients for a given birth date range that have been recalled equal to or greater than the number of tries specified by the drop down.
- Reminder Recall
  - Autodialer Report - Guardian First Name & Last Name, Address, City, State, & ZIP was added. This is used to generate postcards automatically if there is no answer from the party.

## Anatomical Injection Site

"Nasal" was added as an option in the anatomical site injection list.

## Personal Settings Upgrade

- In Patient Add, the following fields now default to the user's Personal Settings (if set): Language, City, State, County/Parish, ZIP Code, Physician, and Facility. Birth State defaults to the value for State in Personal Settings. Birth Country always defaults to "United States."
- In Patient Demographics Edit, a checkbox has been added to "Apply Defaults from Personal Settings to this Record" if those fields are blank.
- Changed "Physician" to read "Primary Care Physician"

## Publicly Supplied Vaccines

Changed "VFC Supplied" to "Publicly Supplied" throughout IWeb in order to represent both VFC & 317 vaccinations

## Vaccination Hyperlinks Updated

The hyperlink colors for the dates on the Vaccination History screen have been turned off.

## Vaccine Sort Order

The vaccine sort order has been modified to now sort by most frequently used vaccines.

## Tracking Vaccines Taken Off Site

An Offsite Lot Number Log was added to the Lot Number Maintenance screen. This log can be used by health workers to note the taking and returning of doses from its home location. The Offsite Lot Number Log will not affect doses used because doses used is an actual count of doses administered. Doses total will not be affected either because it is a count of doses present within the organization. The Offsite Lot Number Log will simply be a way to track the checking out of and return of a vaccine.

- The Offsite Lot Log functionality has been corrected to not act as if in the

edit mode after exiting the page

- The *Cancel* button in Offsite Lot Log Add page now returns the user to the Offsite Lot Log page, and not the lot number search page.

### **IN - Make Lot Number, Manufacturer, Lot Facility mandatory fields**

If Lot Number is set as a mandatory field through PCI2000 Administrator, then Lot Number, Manufacturer and Lot Facility are mandatory fields in IWeb.

### **IN - Consent Form Changes**

- The Patient Consent form is now populating the injection site (*Route/Site*) field.
- Fixed Phone field alignment in the page one of the signature form
- Made signature statement bigger in page one of the signature form (for parent guardian approving for shots)
- Added Underinsured as an option to the VFC Status drop down on the Patient Demographics and Vaccination Detail screens.
- Changed MMR injection site in page two of the signature form
- The First Name field for the Guardian was expanded to prevent word wrapping, and Guardian SSN field was made smaller to compensate for that. The Middle Name field for the Guardian was shifted over to fit between the First Name field and the SSN field.
- The "consent to share" radio button was defaulted to be selected in page one of the signature form
- The word "Race" shown after "Other" was eliminated on the "Race" choice line and the "Other" choice was moved after the "Multi-racial" choice in page one of the signature form

### **IN - VFC Profile Report**

The VFC Profile Report was added to the Indiana State Reports. This report returns the number of patients who are in a particular age range and have a particular VFC eligibility status, based upon vaccines administered within the date range specified.

### **ACIP Schedule Changes**

- The logic that previously displayed valid doses with the "invalid 'X'" has been corrected. The 'X' should only display if the dose was administered too early, too soon, or if it violates other ACIP recommendations (see next.)
- Now noted is that MMR and Varicella are "live viruses" and added logic that requires at least 28 day spacing of doses of these vaccines if not administered on the same day.
- Multiple combinations of Hib (2 dose and 3 dose) will no longer display prior doses as invalid.
- Upper bound age on MMR increased to age 45. (MMR is not recommended for those born before 1957—this upper bound age needs to be incremented each year.)
- DTaP - The minimum age for Dose 4 is 12 months, although the recommended age is between 15-18 months. Several other vaccines are recommended at 12 months, including MMR, Varicella, and Dose 4 Hib. The logic we use for these tables powers both the forecast and reminder/recall features. Because one of the primary objectives of the registries is to immunize kids at the earliest possible opportunity and assure that kids are not lost to follow-up, we recommend Dose 4 DTaP at 12 months, so that it can be done in conjunction with all these other doses.

- Additional schedules added for Adult Td to allow up to 16 doses of DTaP and Td in a person's lifetime. Previously, the schedules were limited to a lower number of doses and if a person had a total of doses greater than our number of dose schedules, nothing over that number was found in the schedule.
- Polio – Minimum age requirement for dose 4 (previously age 4) removed to allow new minimum interval (28 days after Dose 3.) Dose 4 will still be recommended at age 4 years but the minimum interval will allow earlier administration being counted as valid.
- TD recommended at 10 years, but allow 5 years.
- Added Daptacel (DTAP5) to the vaccine list.

## **Fixes**

### **Patient Breakdown Report**

The Patient Breakdown report was taking too long to run. The report was enhanced to perform faster.

### **Daily Patient Immunization List**

The report took too long to run and it eventually timed out. Also reported, sometimes when printing the report, dates that were not specified were showing up. The report was rewritten to improve performance and report correctly.

### **Vaccination Totals Report**

The Vaccination Totals Report was updated to sort Physician alphabetically by last name, rather than by first name.

### **Lot Number Summary**

If the Lot Number was not VFC Eligible, it was showing up as "0" (zero). If it was VFC Eligible, it was showing up as "Y". The report was rewritten to display "N", instead of "0" (zero) when not VFC Eligible.

### **VFC Breakdown report**

Totals within the age ranges were not reporting correctly; specifically, the age ranges were overlapping. The report's query was rewritten to calculate the age range totals correctly.

### **Patient Totals Report**

The Patient Totals report give you a total list of patients seen at each facility within an IRMS. This means that if a unique child visits two facilities, he will show up in each facility total, incrementing the total accordingly. The Patient Total Report was not giving accurate counts because inactive codes were ignored. The report's query was rewritten to give accurate counts.

### **Doses Administered Report – The following were fixed:**

- Only ran correctly for people with IRMS Client privileges. It would show zeroes for people with Facility Client privileges. The report now runs correctly for both IRMS Client and Facility Client.
- The Doses Administered Report was grouping the vaccinations into the wrong age groups. The report now groups vaccinations into the correct age groups.

- When switching a Vaccine lot from publicly supplied to privately supplied Medicaid recipients still show up in the Doses Administered Report as a Medicaid shot, when it should have moved to Local Purchase.

### **Character Save**

If a patient had a "(" character in their first or last name, an error occurred when removing the character and saving in IWeb. This was fixed to save any character other than a symbol or number.

### **Fetch out of sequence**

The error "SQL Exception: Fetch out of sequence" previously received while editing a patient, vaccination, physician or facility record, now no longer occurs.

### **Invalid Vaccines**

In IWeb, the code for vaccinations outside of the ACIP schedule was rewritten to correctly handle invalid vaccines by family - not type

### **Forecast Comments**

Comments on the Vaccination Forecast printout now have asterisks.

### **Age Calculation**

Calculation of months in a patient record was corrected to reflect the correct months.

### **Personal Defaults**

"City" in Personal Defaults now saves in uppercase.

### **Facility Client Privileges**

Facility Client users now have lot numbers, immunizations and physicians limited by Facility in all drop down lists.

### **Historical Vaccinations Grid**

- "DTaP/DTP/DT" changed to "DTaP" on the Vaccination History and Vaccination Historical screens.
- "Hep B-unspecified" changed to "Hep B Ped/Adol – Preserv Free" on the Vaccination History and Vaccination Historical screens.
- "OPV/IPV" changed to "IPV" on the Vaccination History and Vaccination Historical screens.

### **JavaScript Validations & Format Changes**

- The Zip Code field data (in all IWeb pages) is given a validity check after data has been entered. If data is in an incorrect format, a Zip Code field error message opens.
- Validity check is conducted separately on the *To* and *From* date fields in the Patient Reminder Recall for Inactivation report page. If the date does not meet the date mask, an error message will display as the user exits (tab or click) either field.
- Validity check is conducted separately on the *To* and *From* date fields in the CASA Export page. If the date does not meet the date mask, an error message will display as the user exits (tab or click) either field.



- Change warning for invalid Fax number in Facility Add/Update (and all fax number fields throughout app)
- Email validation on patient\_demographics\_edit.jsp (and all email fields throughout app)
- Change refresh error messages to js popup warnings for Contraindications
- Make req'd field labels RED in Contraindications
- Fixed alignment of menu items in CASA Export
- Check District/Region is an integer in CASA Export (and everywhere throughout the app)
- Check for NULL area code inpersonal\_settings.jsp
- Correct TAB order in Facility pages
- Create javascript validation in Mgmt Reminder Recall
- Fix Report Criteria formatting in Reminder Recall Patient Listing
- Check for positive integer for District/Region on onBlur